

# Flame 2006 Owner's Manual

# Fireplaces & Firepits Manufactured after December 1, 2005





### **CONTACT INFORMATION**

For customer service, please contact your authorized dealer immediately. If you need additional information and/or assistance, please contact:

C.A.I. Customer Service Department 1462 East Ninth Street Pomona, CA 91766

> Toll Free: 1-800-CAL-SPAS Fax: 1-909-629-3890

## www.calspas.com

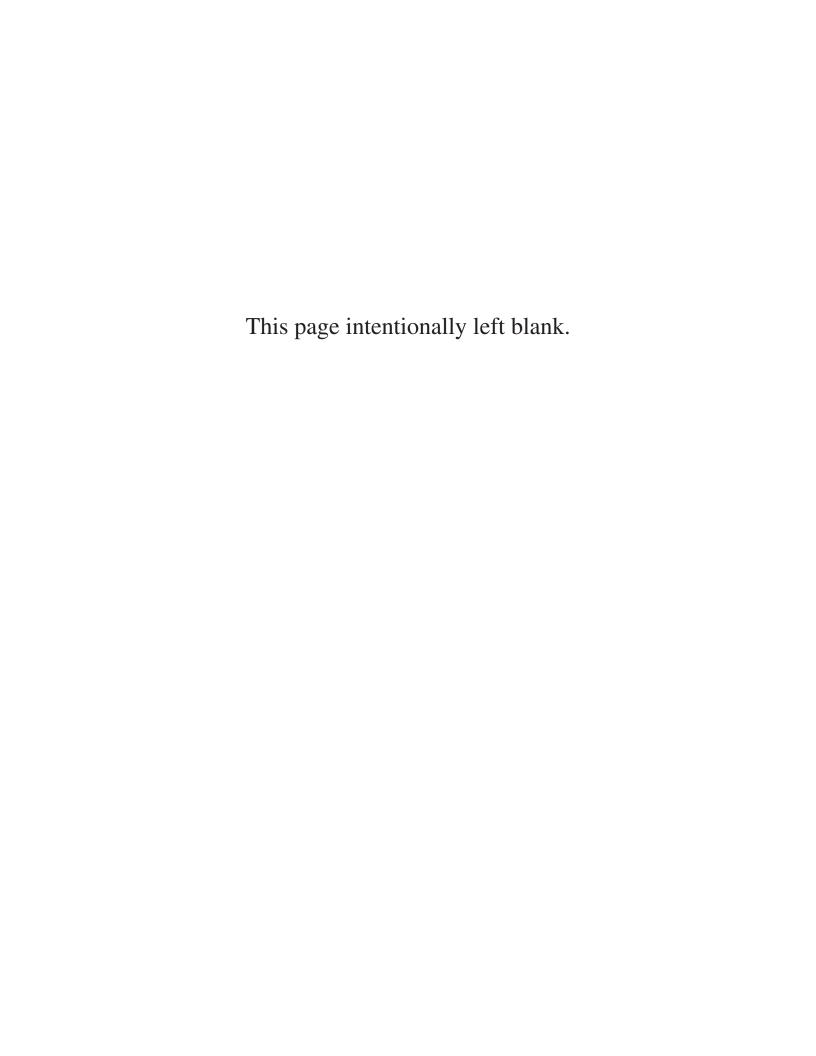
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Due to continuous improvement programs, all models, operation, and/or specifications are subject to change without prior notice.

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## **Read This First!**

# Read this before installing or operating your new Cal Flame firepit or fireplace.

YOU ARE RESPONSIBLE FOR ENSURING THAT A NATURAL GAS LINE IS INSTALLED AND SAFE TO USE. WE HIGHLY RECOMMEND THAT YOU HAVE A LICENSED TECHNICIAN RUN ALL NATURAL GAS LINES AND CONNECT ALL NATURAL GAS HOOK-UPS. CALIFORNIA ACRYLICS INDUSTRIES (C.A.I.) WILL NOT BE HELD RESPONSIBLE IN ANY WAY FOR AN IMPROPERLY CONNECTED GAS LINE.

## **General Safety Precautions**

**CAUTION:** To prevent fire and smoke damage, remove all packaging material before operating your firepit or fireplace.

- Spiders and other insects can nest in the burners and block the gas and airflow to the burner ports. This creates a dangerous condition that can result in a fire from behind the valve panel. Inspect and clean the burners periodically and follow the guidelines in the maintenance section of this manual.
- In the event that a burner goes out and gas escapes, turn off the gas supply let it air-out. Do not attempt to use the firepit or fireplace until the gas has had time to dissipate.
- Unless specifically recommended in this manual, do not repair or replace any part of your firepit or fireplace. Have a qualified technician perform all of the service. Any repairs made by a non- C.A.I. approved dealer technician will void your warranty.
- Keep any electrical supply cord or power supply cord away from the heated areas of the firepit or fireplace.
- Never use the firepit or fireplace in windy conditions. If located in a consistently windy area (ocean-front, mountaintop, etc.) a windbreak will be required.
- The area surrounding your new firepit or fireplace should be kept clean, and free from flammable liquids and other combustible materials such as mops, rags, brooms, as well as solvents, cleaning fluids, and gasoline.
- Do not use the firepit or fireplace as a storage area for flammable or plastic items which may ignite. Do not store any materials inside or near firepit or fireplace. Do not store the liquid propane (LP) cylinder in the vicinity of this or any other appliance when it is not being used.
- Never line firepit or fireplace with aluminum foil.
- When the unit is not in use, be sure to turn off the gas at the LP tank.
- Never locate this appliance in an enclosed room, under a sealed overhead structure or any type, or in an enclosed area such as a garage, shed, or breezeway. Keep clear of trees and shrubs.
- Do not place your firepit or fireplace under or near windows or vents that can be opened into your home.



## **Precautions Regarding Children**

- Never leave children unattended when the firepit or fireplace is being used.
- Do not store items of interest to children around or below the firepit or fireplace.
- Never allow children to sit or stand on any part of the firepit or fireplace.

## **Other Common Sense Precautions**

- Never leave the firepit or fireplace unattended while using high flame settings.
- Never let clothing or other flammable materials come in contact with or close to any grate, rock or fire screen until it has cooled. Fabric may ignite and result in personal injury.
- When using the firepit or fireplace, do not touch the rock, fire screen, or immediate surroundings, as these areas become extremely hot and could cause burns.
- Proper apparel is a safety consideration. Never wear loose fitting or hanging garments while using your new firepit or fireplace.
- Do not heat any unopened glass or metal container of food on the firepit or fireplace. Pressure may build up and cause the container to burst resulting in serious harm or damage to the firepit or fireplace.
- Do not use charcoal in this firepit or fireplace.
- Do not block the vents located near the base of your firepit or fireplace as gas may build up in case of leak and cause serious damage.
- Do not reach over your firepit or fireplace or any other surfaces when hot or in use.

Most cities and counties require permits for exterior construction and electrical circuits. In addition, some communities have codes requiring residential barriers such as fencing and/or self-closing gates on property to prevent unsupervised access to the property by children under the age of 5. Your dealer can provide information on which permits may be required and how to obtain them prior to the delivery of your equipment.

### What to Do If You Smell Gas

- 1. Shut off gas to the firepit or fireplace.
- 2. Extinguish any open flame.
- 3. If odor persists, immediately call your gas supplier or your fire department.

#### DO NOT TRY TO FIX THE PROBLEM YOURSELF..



## **Planning For Your Firepit or Fireplace**

Safe and satisfactory operation of your new firepit or fireplace depends upon its proper installation. Installation, adjustments and service must be performed by C.A.I. qualified installers and service technicians to ensure proper operation and prevent accidents.

## **Location**

Your Cal Flame firepit or fireplace is designed and intended for OUTDOOR USE ONLY in a well ventilated space and must not be used inside a building, garage, or any other enclosed area. Do not use your firepit or fireplace for cooking.

Place your firepit or fireplace on a flat and stable surface in an outdoor location such as a patio deck. Do not locate the appliance where it can get excessively wet or submerged in water.

When determining a suitable location, take into account concerns such as exposure to wind, proximity to traffic paths, and windows that open into the home.

Locate your firepit or fireplace adjacent to the gas supply line (LP or NG), preferably with the shortest gas line run possible.

Do not install the log set in an unvented appliance.

### **Built-In Installation**

Your new firepit or fireplace is designed for easy installation into a non-combustible enclosure. The supporting deck and counter must be level and flat. When determining location, provide ventilation in the enclosure so that gas will not become entrapped in the event of a leak.

## **LP Gas Requirements**

Check the rating plate to make sure the gas supply you are hooking up to is the gas type the firepit or fireplace is manufactured for.

**IMPORTANT WARNING:** All Cal Flame firepits and fireplaces are manufactured with the highest regard to safety. For this reason, Cal Flame firepits and fireplaces are either manufactured to operate on liquid propane (LP) or natural gas (NG) and cannot be converted. To verify the firepit's or fireplaces operating fuel, remove the bottom drip pan and check serial number label on the left. Either LP or NG will be marked on the operating tab, indicating the proper operating fuel. Attempting to convert Cal Flame firepits or fireplaces from one fuel to another may result in serious injury and void the warranty coverage.

If you do not have an updated filler valve on your existing propane tank, you will need to purchase one at your local hardware store, as you will not be allowed to refill the tank at any filling station.

### LP Gas Hook Up

An enclosure for an LP gas cylinder shall be vented by openings at the level of the cylinder valve and at floor level. The effectiveness of the opening(s) for purposes of ventilation shall be determined with the LP-gas supply cylinder in place. This shall be accomplished in one of the following manners:

- 1. One side of the enclosure shall be completely open.
- 2. Enclosures that have four sides, complete with a top and bottom:



### **Planning For Your Firepit or Fireplace**

- a. At least two ventilation openings at cylinder valve level shall be provided in the sidewall, equally sized, spaced at 180° (3.14 rad), and unobstructed. Each opening shall have a total free area of not less than fi" square inch per pound (7.1 cm≈/kg) of stored fuel capacity, and not less than a total free area of 10 square inches (64.5 cm≈).
- b. Ventilation opening(s) shall be provided at floor level and shall have a total free area of not less than fi square inch per pound (7.1 cm≈/kg) of stored fuel capacity and not less than a total free area of 10 square inches (64.5cm≈). If ventilation openings at floor level are in a sidewall, there shall be at least two openings. The bottom of the openings shall be at floor level and the upper edge no more than 5 inches (127 mm) above the floor. The openings shall be equally sized, spaced at 180° (3.14 rad) and unobstructed.
- c. Every opening shall have minimum dimensions so as to permit the entrance of a 1/8 inch (3.2 mm) diameter rod.

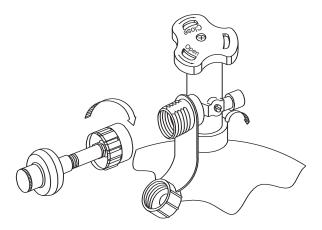


Figure 1. LP Attachment Assembly

#### LP Gas Manifold Pressure

For plumbed-in LP installation, use a convertible regulator and set it for LP gas.

## **LP Gas Supply Pressure**

Maximum line pressure for plumbed-in propane is 14" W.C psi (3.5 kPa). Minimum line pressure for propane is 11" W.C.

### **LP Gas Pressure Regulator**

The unit must be used with the gas pressure regulator. The regulator will control and maintain a uniform gas pressure in the manifold. The burner orifices have been sized for the gas pressure delivered by the regulator.

## **LPG Cylinder Specification**

Any LP gas supply cylinder used with this firepit or fireplace must be approximately 12 inches in diameter and 18 inches high. The maximum fuel capacity is 20 lbs. of propane, or 5 gallons. Full cylinder weight should be approximately 38 lbs. (43.7 lbs. nominal water capacity.) Always use the cylinder dust cap on the cylinder valve outlet during transport and when the cylinder is not connected to the firepit or fireplace.



## Transporting the LP Gas Supply Cylinder

Only one cylinder should be transported at a time. Transport cylinder in an upright and secure manner with control valve turned off and the dust cap in place.

## Natural Gas Requirements

Always check the rating plate to make sure the gas supply you are hooking up to is the gas type the firepit or fireplace is manufactured for.

**IMPORTANT WARNING:** All Cal Flame firepits and fireplaces are manufactured with the highest regard to safety. For this reason, Cal Flame firepits and fireplaces are either manufactured to operate on liquid propane (LP) or natural gas (NG) and cannot be converted. To verify the operating fuel, remove the bottom drip pan and check serial number label on the left. Either LP or NG will be marked on the operating tab, indicating the proper operating fuel.

Attempting to convert a Cal Flame firepit or fireplace from one fuel to another may result in serious injury and void the warranty coverage.

**IMPORTANT:** Never connect the firepit or fireplace to an unregulated gas supply.

The installation of this appliance must conform with local codes or, in the absence of local codes, to the national fuel gas code, ANSI Z223.1a-1998. Installation in Canada must be in accordance with the standard CAN/CGA-B149.2, Propane Installation Code. Natural gas connection must be performed by a licensed contractor or local gas company representative.

Ensure that the service supplying the firepit or fireplace is fitted with a conveniently positioned shut off valve with easy access.

Your Cal Flame firepit or fireplace for use with natural gas comes equipped with its own regulator which MUST NOT be removed. If this regulator needs to be replaced, use only the type specified by Cal Flame for this appliance.

- 1. Remove the rear panel to gain access to the regulator and gas connection point.
- 2. Connect a suitable flex connector to the regulator.

## **Testing for Leaks**

Perform a leak test at least once each year whether the gas supply cylinder has been disconnected or not. In addition, anytime the gas cylinder is connected to the regulator or any part of the gas system is disconnected or replaced, conduct a leak test.

As a safety precaution, remember to always leak test your firepit or fireplace outdoors in a well-ventilated area. Never smoke or permit sources of ignition in the area while doing a leak test. Do not use a flame, such as a lighted match to test for leaks. Use only a leak testing solution as specified below.

- 1. Prepare a leak testing solution of sudsy water by mixing in a spray bottle half-liquid soap and half water.
- 2. Check and make sure all the control knobs are in the OFF position.
- 3. Turn cylinder valve knob counter clockwise one turn to open.
- 4. Apply leak-testing solution by spraying on joints of the gas delivery system.



### **Planning For Your Firepit or Fireplace**

- 5. Blowing bubbles in the soap solution indicates that a leak is present.
- 6. Stop a leak by tightening the loose joint or by replacing the faulty part with a replacement part recommended by the manufacturer. Do not attempt to repair the cylinder valve if it should become damaged. The cylinder must be replaced.
- 7. If you are unable to stop a leak, shut off the gas supply at the cylinder valve. Remove the cylinder from the firepit or fireplace. Call an authorized gas appliance service technician or LP gas dealer. Do not use the appliance until the leak is corrected.
- 8. Push in and turn any control knob to release pressure in the hose and manifold.
- 9. Turn off the control knob.

## **Using Your Firepit or Fireplace**

Always keep the appliance area clear and free from combustible materials, gasoline and any other flammable vapors and liquids.

For fireplaces with a waterfall, make sure that there is no debris in the filler pan. The pump will recirculate water up through the fireplace and then filter down the sides and front. It is also important that you maintain a consistent water level. Running the pump dry will burn out the pump motor.

#### DO NOT USE SOLID FUEL IN YOUR FIREPIT.

Inspect the burner before each use of the appliance. If there is any evidence that the burner is damaged, it must replaced before operating. Upon completing the gas line connection, a small amount of air will be in the lines. When first lighting the burner, it will take a few minutes for the lines to purge themselves of this air. Subsequent lighting of the appliance will not require such purging.

**CAUTION:** Never allow the ON/OFF valve to remain in the open position without placing a burning match on top of the burner FIRST!

IF YOU DO NOT FOLLOW THESE INSTRUCTIONS EXACTLY, A FIRE OR EXPLOSION MAY RESULT, CAUSING PROPERTY DAMAGE, PERSONAL INJURY AND/OR LOSS OF LIFE.

## **Safety Information**

#### What To Do If You Smell Gas

- Do not try to light the appliance.
- Do not touch any electric switch. Do not use any phone in the immediate area.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.
- Use only your hand to turn the gas control knob. Never use tools. If the valve will not turn by hand, don't try to repair it -- call a qualified service technician. Force or attempted repair may result in a fire or explosion.
- Do not use this appliance if any part has been underwater. Immediately call a qualified service technician to inspect the appliance, and to replace any part which has been under water.

## **Lighting Your Gas Firepit**

Read the safety information above before attempting to light your fireplace or firepit.

This appliance must be lit by hand. When lighting, follow these instructions exactly. Before lighting, smell around the appliance area for gas. Be sure to smell next to the base of the appliance, because some gas is heavier than air and will settle on the ground.

- 1. Locate the manual gas control valve, located on the outside of the firepit, two inches from the base of the firepit. (Look for a bright red knob.)
- 2. Place a burning match on top of the burner in the middle where ports are present. DO NOT HOLD THE MATCH IN YOUR HAND. For natural gas appliances, turn on the ON/OFF valve slowly at



### **Using Your Firepit or Fireplace**

the appliance. For LP appliances, turn the valve on the LP tank counterclockwise all the way and then turn "ON" the ON/OFF valve slowly at the appliance.

- 3. If the burner does not light before the match goes out, immediately turn the gas valve to "OFF".
- 4. Wait at least five minutes to clear out any gas. Then smell for gas, including the base of the appliance. If you smell gas, STOP! Follow Safety Information above. If you don't smell gas, repeat Step 2 above.

### To Turn Off the Appliance

- 1. Turn the ON/OFF valve to the "OFF" position at the appliance for the natural gas appliance.
- 2. For an LP appliance, turn the ON/OFF valve to the "OFF" position at the appliance and then turn the valve on the LP tank clockwise to the "OFF" position.

## **Lighting and Operating Your Gas Fireplace**

This appliance has a pilot which must be manually lit. When lighting the pilot, follow these instructions exactly.

#### READ THE SAFETY INFORMATION ON THE PREVIOUS PAGE BEFORE PROCEEDING!

- 1. Open the fireplace screens.
- 2. Push in the gas control knob slightly and turn it clockwise to the OFF position.
  - Note: The knob cannot be turned unless pushed in slightly. Do not force the knob to turn. If you do not smell gas, proceed to the next step.
- 3. Locate the pilot burner on the right hand side between the base logs.
- 4. Push the knob IN slightly and turn it counterclockwise to the PILOT position.
- 5. Push the control knob all the way in and hold it in. Immediately press the ignitor (piezo) button to light the pilot.
- 6. Continue to hold the control knob in for about one minute after the pilot is lit.
- 7. After one minute, release the knob. It will pop back out and the pilot should remain lit. If the pilot goes out, repeat steps 2 through 6.
  - If the knob does not pop out when released, stop and immediately call your service technical or gas supplier. If the pilot will not stay lit after several tries, turn the gas control to the OFF position and call your service technician or gas supplier.
- 8. Push in the gas control knob and turn counterclockwise to the ON position.
- 9. To light the burners, turn the gas control that regulates gas flow to the burners. Turn it from LOW to HIGH to increase the gas flow.
- 10. Close the fireplace screens.

When the appliance is being operated for the first time, allow for a supervised burn of 30 minutes. Then shut the appliance off and let it cool completely before relighting. This allows proper curing time for the logs. (After several hours of operation the logs will discolor slightly. This is normal.)



### **Manual Thermostat**

Operation of the thermostat is based on the position of the control lever. While turning the lever to the ON position, note the position the main burner ignites. Leaving the lever at this position would cause the burner to operate until the room temperature warms up slightly, then start a gradual flame reduction until the temperature stabilizes.

### Millivolt Control

The millivolt control lever allows for flame height and heat output adjustment. Turn the lever counterclockwise from the LOW position to increase flame to the HIGH position and clockwise to decrease flame.

## **Turning off the Gas for Your Gas Fireplace**

- 1. Open the fireplace screens.
- 2. Push in the gas control knob slightly and turn it clockwise to the OFF position.

## **Lighting Your Wood Burning Fireplace**

Your wood burning fireplace is designed to use a grate to hold the wood to be burned approximately 2"-3" off the base. This allows air to get to the bottom of the wood and gives room for ash to accumulate. Do not attempt to burn wood in your appliance without a proper grate installed.

**WARNING:** Never use liquids such as gasoline or lighter fluid in a wood burning fireplace. Serious injury can occur.

Have several sizes of wood available. Small pieces will be needed to start the fire, some medium sizes and finally larger logs that will burn for a longer period of time. Make sure all logs are small enough to fit entirely into the fireplace or firepit. If the wood is too large, cut or split it until it will fit into the enclosure.

- 1. Wad up some dry newspaper and put it under the grate but be carefull of ash that may be under grate from a previous fire.
- 2. Put small pieces of wood over the newspaper, on the grate. Small wood should not be more than 1/2" thick and 1" wide. Smaller wood will burn easier and make the fire easier to start. Make sure to leave room for air to circulate around the small pieces of wood.
- 3. On top of the small pieces of wood put a few medium sized pieces of wood. These pieces can be from 1" to 2" thick but should not block airflow around the small pieces.
- 4. Light the newspaper under the grate in several places. As wood begins to burn, add more medium sized pieces one at a time until a good coal base is formed. At this time you can add larger pieces of wood. Always make sure there is sufficient room for air to flow around the wood that is added or you may smother your fire.

WARNING: Never leave a burning fireplace or firepit unattended!



## **Maintenance and Care**

## **Maintaining Your Firepit or Fireplace**

Inspect the appliance before initial use. Clean the appliance at least annually and have it inspected by a qualified field service person.

Tampering with this appliance is DANGEROUS and voids all warranties. Replace any faulty components only with approved components.

For best operation, the burner flames should be steady, not lifting or floating.

Periodically remove the logs and examine the burner. If the burner is dirty, clean it with a soft wire brush. Also examine the area around the burner air shutter. Remove any dirt or debris in this area. This will ensure long life and trouble-free operation.

Periodically check the hose connecting the LP gas cylinder to ensure it is not damaged in any way.

Carbon (soot) may build up on the surfaces of the logs with heavy use. This is more likely to occur with LP gas. Clean soot off the surface of the logs periodically to prevent excessive buildup.

### **After Use Care**

The easiest way to clean the firepit or fireplace is to let the firepit/fireplace cool completely off.

- With a wood burning fireplace, remove the steel grate and sweep out the ashes and leftover kindling.
- With a gas firepit or fireplace, spray the enclosure off with water. Note: Do NOT spray water directly onto the burner and pilot light of the gas fireplace.

## **Covering Your Firepit**

When not in use and after cooling, cover your Cal Flame firepit with our full length, zippered side canvas cover. The cover will help protect your firepit/fireplace from detrimental effects of weather and environmental pollutants (see your local Cal Flame dealer for details).

# **Appendix**

## **Replacement Parts**

Description	Part Number	Quantity
Firepit Parts		
Repair Kit #1	BBQ04210001	1
Repair Kit #2	BBQ04210002	1
Burner Assembly (Firepit)	BBQ04100656	1
Firepit Log Base	BBQ04000655	1
Fireplace Parts		
1/40 HP Submersible Recirculating Pump	BBQ04103080	1
3/8" Clear Flex Tubing	PLU21500290	1
Gas Log Burner Assembly (NG) 24"	BBQ04100621	1
Gas Log Burner Assembly (LP) 24"	BBQ04100751	1
24" Sierra Oak Logs	BBQ04100619	1



## **Warranty Information**

See your Cal Flame dealer for a copy of the applicable warranty, details and any questions you may have regarding the warranty coverage on your firepit or fireplace.

### **Warranty Limitations**

The Limited Warranty is void if the firepit or fireplace has been subject to negligence, alteration, misuse, abuse, repairs by non- C.A.I. authorized representatives, incorrect electrical installation, acts of God and any other cases beyond the control of C.A.I. Examples of common acts invalidating this warranty include but are not limited to:

- Scratches caused by normal use.
- Damage caused by extreme weather conditions (heat, cold, etc.).
- Damage caused by dirt, sand, and/or water damage.
- Damage caused by continued operation of the firepit or fireplace with either known or unknown problems.
- Damage caused by direct sunlight.
- Damage caused as a result of failure to follow the operating instructions as defined in this owner's manual.

This Limited Warranty applies only to firepits or fireplaces normally used for personal, family, or household purposes.

This Limited Warranty specifically excludes commercial firepits or fireplaces.

### **Warranty Exclusions**

C.A.I. warranties the firepits and fireplaces from defects in material and workmanship for a period of one year from the original date of purchase. Firepit and fireplace stereo systems are delivered with their own manufacture warranty. For more information, please see their warranties in the owner's information package that was delivered with your firepit or fireplace for more information.

REGISTER YOUR NEW PRODUCT AT WWW.CALSPAS.COM





# Please make a record of the following. It will be valuable if service is required.

**Locating the product serial number:** The serial number of your Cal Flame firepit or fireplace is located on a metal plate on the back of the unit. You will need this number to properly register your Firepit / Fireplace and activate coverage.

Fireplace / Firepit Model:
Fireplace / Firepit Serial Number:
Date Purchased:
Date Installed:
Cal Flame Dealer's Phone Number:
Cal Flame Dealer's Address:

C.A.I. Customer Service Department 1462 East Ninth Street Pomona, CA 91766

> Toll Free: 1-800-CAL-SPAS Fax: 1-909-629-3890

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